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SHIPBOARD WOMEN'S HEALTH CARE: PROVIDER PERCEPTIONS

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SUMMARY

Problem

Women have served aboard auxiliary U.S. Navy ships as integrated members of the shipboard work force since 1978. In 1994, women began serving aboard combatant ships with the infusion of women into the work force of USS *Dwight D. Eisenhower* (CVN 69). The provision of the highest standard of medical care for shipboard men and women is a priority at all levels in the U.S. Navy.

Objective

This study is a preliminary evaluation of health-care provider perceptions of the adequacy of human resources, supplies, and training effort in shipboard medical departments.

Approach

This evaluation was performed by conducting a personal interview with the senior health-care provider of 36 ships where women are integrated members of the work force.

Results and Conclusion

The responses in this study indicate that medical departments perceive several limitations in their ability to provide the highest level of care for shipboard women. While the responses varied, the limitations appeared to fall into one of two main categories: general health-care limitations and practice-specific limitations. Among the general limitations, most were reflective of the unique nature of the shipboard environment. Ships have limited space, staffing, access to specialists and hospitals. Additionally, budgets are also limited and shipboard health-care providers must optimally apply these resources to effectively pursue their missions. Practice-specific limitations related primarily to clinical expertise in women's health care and availability/selection of medications and supplies. Study limitations and direction for future research are discussed.

Shipboard Women's Health Care: Provider Perceptions

A U.S. congressional mandate to the Department of Defense has called for research focused on the needs of women in the military (U.S. Congress, 1993). A Tri-Service Defense Women's Health Research Program review committee made women's health-care a top research priority (Naval Medical Research & Development Command, 1994). This research study is a qualitative evaluation of the effort to provide a high quality medical care to women serving aboard Navy ships.

As of August 31, 1995, approximately 8,033 women were serving aboard U.S. Navy ships, excluding hospital ships. Of those, approximately 19% of the female shipboard personnel in the U.S. Navy served aboard combatant ships, while 81% served aboard auxiliary ships (Bureau of Naval Personnel, 1995). The terms *combatant ship* and *auxiliary* (or noncombatant) *ship* describe the role a ship or class of ships may have in naval operation. Examples of combatant ships include aircraft carriers, battleships, cruisers, destroyers, frigates, submarines, and amphibious warfare ships. Examples of auxiliary ships include command ships, tenders (submarine and destroyer), ammunition, supply, fleet support, and repair ships (Noel, 1989). Auxiliary ships replenish combatant ships with ammunition, stores, and fuel while they are underway. Because of their role as mission support, auxiliary ships spend more time coordinating with supply centers in port.

Hoiberg (1984) examined major health-related issues among women in the Navy. She found that the majority of hospitalizations from 1974-1979 originated from pregnancy-related conditions. Elective abortion was identified as the most frequent pregnancy-related hospitalization condition, while childbirth was identified as the second most frequent reason for pregnancy-related hospitalization. Hoiberg also found that female recruits had the highest hospitalization rates, as a group, across occupational field and paygrade.

In a subsequent examination of hospitalization rates among of Navy women, Hoiberg and White (1992) note a change in health status. Hospitalization admissions for each of three cohort groups (i.e., 1973-1977, 1978-1982, and 1983-1987) were examined over a 4-year period. Results indicate that the highest Department of Defense hospitalization rates occurred for pregnancy-related conditions within each cohort group. Elective abortion in the 1978-1982 and 1983-1987 cohort groups decreased markedly, possibly due to the discontinuation of funding for abortions in federal inpatient medical facilities in 1978. Increases in pregnancy-related conditions (deliveries, complications from pregnancy, and spontaneous/other abortions) are attributed to

changes in Navy policy, allowing female personnel to remain on active duty during and after their pregnancy. Overall, Hoiberg and White concluded that there are "many improvements to Navy women's health status and no major decrements" (Hoiberg & White, 1992, p.531).

Sex differences among men and women in health-care use has been shown to exist in both civilian and military populations. In a civilian population, controlling for pregnancy, health-care use, and age, numerous studies have demonstrated that women use health care more often than men do (Ajzen, 1991; Anderson & Andersen, 1967; Briscoe, 1987; Cleary, Mechanic, & Greenley, 1982; Kohn & White, 1976; Nathanson, 1975; Tessler, Mechanic, & Dimond, 1976; Verbrugge, 1979; Verbrugge, 1985; Verbrugge & Depner, 1980). In an examination of U.S. Navy shipboard personnel and their use of health care, several studies (Nice & Hilton, 1994; Schwerin & Corcoran, 1996) found that shipboard women use health care more often than men do. Additionally, Nice and Hilton (1994) found that women in nontraditional occupations visited sick call significantly more often than did women in traditional occupations.

The purpose of this study was to evaluate the perceived ability to provide adequate health care by shipboard medical departments on combatant and auxiliary U.S. Navy ships. Structured interviews were conducted with the senior medical department representative of each ship. Approximately half of the structured interview questions elicited qualitative responses. Due to the nature of qualitative data, conclusions from the author will be limited, allowing the readers to form their own conclusions concerning the significance of the findings.

Method

Subjects

Participants were U.S. Navy medical personnel serving aboard ship. The interview participant was the ship's senior medical department representative. The title of the interview participants included Senior Medical Officer (SMO), Medical Officer (MO), and Independent Duty Hospital Corpsman (IDC). A total of 36 health-care providers agreed to be interviewed. Four interviews could not be used due to variations in the interview format that provided incomparable data. A total of 32 medical department personnel provided data for this study.

Twenty-six auxiliary and six combatant ships' medical departments provided data for this study. Ships included in these analyses spent an average of 67.25 days at sea (SD = 60.90) and

144.29 days in port (SD = 82.20). Medical departments reported an average caseload of 18 patients/day (SD = 15.51), of which approximately 7 were female (SD = 9.38).

Instrument

A standardized open-ended interview was divided into six sections: Human Resources, Fiscal and Equipment Resources, Automated Data Processing (ADP) Resources, Logs and Records, Morbidity and Incidence Data, Health-Care Provider Issues, and Training and Education/Health Awareness. The Human Resources section investigated the adequacy of the number of medical department personnel assigned to the ship. The Fiscal and Equipment Resources section asked about the adequacy of the medical department's budget, Authorized Medical Allowance List (AMAL), pregnancy testing, and any recommendations for AMAL changes to enhance the health care provided to women at sea. The ADP Resources section was designed to determine the level of utilization of the Shipboard Automated Medical System (SAMS) in medical departments. Logs and Records identified the nature of record keeping in medical departments. Morbidity and Incidence Data attempted to determine the total medical department daily caseload, female medical daily caseload, pregnancy testing and occurrence, sexually transmitted disease (STD) incidence, and medical evacuation (MEDEVAC frequency). Health-Care Provider Issues was designed to evaluate the medical departments' personnel feelings on their ability to provide adequate health care for their ships' female patient population. This includes the physical environment of the medical department, obstetrical and gynecological (OB/GYN) services, pregnancy testing, and contraceptive availability. The Training and Education/Health Awareness section was designed to provide information about the health training and education available aboard ship. Finally health-care providers were asked their "comments, concerns, and/or recommendations" and their opinion of the "major issues facing women aboard ship." The question asking for "comments, concerns, and/or recommendations" was asked once after the first half of the interview and again at the end of the interview.

Procedure

Interviewees were selected for participation based on their role as a health-care provider for male and female U.S. Navy personnel between the time period of May 1, 1995, through November 30, 1995. Participants were asked for their input as part of a larger shipboard health research survey. Six research associates conducted the interviews. Each of the interviewers has extensive knowledge of shipboard medical issues with an average of 13.8 yr. of U.S. Navy experience. Male interviewers conducted 23 of the interviews, while female interviewers

conducted the remaining 13 interviews. The research associates conducted the interview during a time convenient for the senior medical department representative. Interviews occurred in the medical departments aboard ship. The average interview time was approximately 56 min.

Results

Responses to the dichotomous items concerning human resources, fiscal and equipment resources, ADP resources, and logs and records indicated a dissatisfaction with the resources available to shipboard health-care providers. Specifically, more than half of health-care providers (56.3%) reported that their staffing could not "adequately meet mission requirements." More than 40% of shipboard health-care providers reported that their budget (46.9%) and AMAL (43.8%) could not "adequately meet mission requirements." Shipboard medical departments did appear to have an AMAL designed specifically for women at sea (90.6%), adequate supplies for pregnancy testing (81.3%), and used SAMS (100%; see Table 1).

Table 1

Human Resources, Fiscal and Equipment Resources, Automated Data Processing Resources, and Logs and Records Responses

Categorical response item	"Yes"	"No"	"N/A"
Do you feel your human resources are adequate to meet mission requirements?	43.8%	56.3%	00.0%
Do you feel your budget is adequate to support mission requirements?	53.1%	46.9%	00.0%
Is your AMAL adequate to support women's health-care needs?	56.3%	43.8%	00.0%
Do you have an AMAL designed specifically for women at sea?	90.6%	06.3%	03.1%
Do you have adequate supplies for pregnancy testing?	81.3%	15.6%	03.1%
Is SAMS being used by medical?	100.0%	00.0%	00.0%

When asked, "What, if any, recommendations have you made for AMAL changes to enhance your ability to diagnose and treat women more effectively?," shipboard health-care providers primarily responded with requests for additional Depo-Provera (4) and a greater variety of birth control pills (BCPs, 9). Many were concerned with the efficacy of pregnancy and STD test kits (see Appendix A).

For the midsurvey question, "Comments, concerns, and/or recommendations," health-care provider concerns centered around pregnancy-related issues (e.g., pregnancy testing and personnel issues if a crew member becomes pregnant; see Appendix B).

Responses to dichotomous items concerning the medical department environment appears positive while birth control supplies and pregnancy testing appears to be inadequate. Results indicate that 78.1% of medical-care providers support the notion that there is adequate privacy for females in medical, 94% report adequate availability of stand-bys, sufficient OB/GYN training is reported by 81.3% of health-care providers, while 75% of health-care providers report having ample "female specific" diagnostic equipment. These findings provide support for the supposition that medical departments aboard ship are providing adequate health care. When asked if medical departments had an adequate supply of contraceptives, 62.5% answered "yes." Few medical departments (9.4%) said they conduct pregnancy tests upon the arrival of female shipboard personnel while 15.6% said they conduct pregnancy tests prior to extended deployments (see Appendix D).

A chi-square test of significance was used to test for significant differences in responses due to the title and rank of the respondent. Of all comparisons between the title and rank of the respondents and their perception of their ability to provide health care, only the item, asking "Do you feel you have been adequately trained to perform OB/GYN exams and treat common female specific problems?" produced a significant difference ($\underline{\text{chi-square}} = 6.86$, $\underline{df} = 1$, $\underline{p} < .01$). Perceived adequacy of OB/GYN training was dependent on rank and title, whereby MOs reported feeling better prepared to perform OB/GYN exams and treat common female specific problems than did IDCs and senior enlisted corpsmen.

Health-care providers listed the contraceptives available to shipboard personnel and ranked the three most requested contraceptives from medical departments. Condoms, Depo-Provera, Norplant, BCPs, foam, surgical intervention, diaphragms, and intrauterine devices (IUDs) were available at varying levels in medical departments aboard ship. When asked to rank the most requested contraceptives, health-care providers reported condoms, Depo-Provera, and

BCPs as most frequently requested, with BCPs the most requested of the three (59.4%; see Table 2).

Table 2
Health-Care Provider Issues: Contraceptives Available, Top 3 Contraceptives

Contraceptive Availability	Yes	No	N/A	% #1 votes	% #2 votes	% #3 votes	% "no" votes
Condom	100	00.0	00.0	31.3	25.0	40.6	03.1
Depo-Provera	93.8	06.3	00.0	09.4	46.9	31.3	12.5
Norplant	31.3	65.6	03.1	----	----	----	----
Birth control pills	96.9	03.1	00.0	59.4	25.0	12.5	03.1
Foam	12.5	87.5	00.0	00.0	00.0	00.0	100
Surgical intervention	12.5	87.5	00.0	00.0	00.0	00.0	100
Diaphragms	56.3	43.8	00.0	00.0	00.0	00.0	100
Intrauterine device (IUD)	09.4	90.6	00.0	00.0	00.0	00.0	100

When asked about the amount and type of training provided aboard ship, health-care providers reported that educational inservices were conducted more frequently for STDs (96.9%) and birth control methods (90.6%), while Navy pregnancy policy (84.4%) and health promotion (75%) received relatively less emphasis. Similarly, handouts were made available most frequently for birth control methods (68.8%) and STDs (65.6%), and less so for health promotion (50%) and Navy pregnancy policy (40.6%; see Table 3).

Responses to the question, "What do you feel are the major issues facing women aboard this ship?," appeared to touch on a number of concerns. Most respondents (8) reported that OB/GYN care, pregnancy, and STDs were the dominant issues facing women aboard ship, while others suggested that barriers to providing adequate health care (5), crew member immaturity (5), and female berthing (4) were prevalent problems (see Appendix D).

For the final question eliciting "Comments, concerns, and/or recommendations," most respondents who offered an opinion noted medical treatment barriers (4) as well as the need for medical personnel to provide psychological counseling (3; see Appendix E).

Table 3
Training and Education/Health Awareness

Training and education topic	% "yes" for inservices	% "no" for inservices	% "yes" for handouts	% "no" for handouts
Birth control methods	90.6	09.4	68.8	31.3
Sexually transmitted diseases	96.9	03.1	65.6	34.4
Health promotion	75.0	25.0	50.0	50.0
Navy pregnancy policy	84.4	15.6	40.6	59.4
Other	15.6	84.4	15.6	84.4

Discussion

The responses enumerated in this study indicate that medical departments perceive several limitations in their ability to provide the highest level of care for shipboard women. While the responses varied, the limitations appeared to fall into one of two main categories: general health-care limitations and practice-specific limitations.

Among the general limitations, most were reflective of the unique nature of the shipboard environment. Ships have limited space, staffing, access to specialists and hospitals. Additionally, budgets are also limited and shipboard health-care providers must optimally apply these resources to effectively pursue their missions. Shipboard medical departments must operate within these constraints, and, even on the largest ships with robust capabilities, cannot provide the full array of medical services. Few ships, for example, have specialists on board. Most do not have a physician at all. In this context, it would not be surprising to find some concern among providers regarding adequacy of resources, not only for women's health-care but for health-care services in

general. However, the finding that so many providers felt that their staffing (56%) and budgets (47%) were inadequate certainly warrants further, more in-depth review.

Practice-specific limitations related primarily to clinical expertise in women's health care and availability/selection of medications and supplies. Only 56.3% of respondents report that their AMAL was sufficient to support the health-care needs of shipboard women. Suggested improvements included increased and more varied supplies of contraceptives, pregnancy testing, and STD resources. Specifically, health-care providers reported needing additional supplies of Depo-Provera, greater variety among BCPs, and more accurate pregnancy and STD testing kits.

While it is not feasible to offer the full array of BCPs aboard a ship with limited space and relatively small numbers of women, certain services, such as initial fitting for diaphragms or insertion of Norplant, are beyond the scope of care for IDCs. These provider concerns warrant review by the medical staffs responsible at the headquarters level for oversight and support of their shipboard medical departments. Avenues for improvements include (1) the biennial update of the AMALs for each class of ships coordinated by the headquarters medical departments ensuring currency, appropriateness, and standardization of shipboard medical equipage, and (2) improved coordination with shore medical facilities providing sailors on non-AMAL prescriptions (including contraceptive modalities not available on their ship) enough medication to see them through an entire deployment and appropriate access to supporting shore-based medical facilities.

Another practice limitation requiring attention is OB/GYN training of non-physician health-care providers. IDCs reported significantly less confidence with OB/GYN training than medical officers. As more women are assigned to non-medical officer ships, there will be a growing need to ensure that IDCs have the appropriate training and level of comfort in taking care of women patients. Additional research could provide more specific information to help determine the scope of any subsequent OB/GYN training for IDCs.

Medical departments appeared to be doing well regarding shipboard educational programs. Nearly 97% of medical departments reported having STD educational programs, approximately 91% reported medical staff training on birth-control methods, and 84% of respondents reported having programs centered on the Navy pregnancy policy. It is unclear, though, whether these educational programs have had a positive impact on the behavior of shipboard personnel (e.g., reduced unwanted pregnancies or lower STD incidence rates). Subsequent research could evaluate the efficacy of such educational efforts.

These results should be considered with caution. A major limitation of this study is that the data are entirely self-reported data, derived from the subjective interpretation of an vested participant -- the medical-care provider. Although this is the purpose of qualitative interviews, this qualification should be made.

A second limitation of this study is the marginal imbalance of response between auxiliary and combatant ships. Of the interviews included in these analyses, 26 (81% of total sample) were auxiliaries and 6 (19%) were combatants. Currently, 98 ships include women among crew members, 69 (70%) auxiliary, and 29 (30%) combatant (Bureau of Naval Personnel, 1995). Additional responses from combatant ships would allow, for instance, assessment of the relationship of responses to type of ship (combatant vs. non-combatant), level of care aboard ship (physician vs. IDC), and number of women aboard. Future studies intend to examine these relationships.

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Appendix A

"What, if any, recommendations have you made for AMAL changes to enhance your ability to diagnose and treat women more effectively?"

Inadequate supply of birth control/pills (n = 13).

Increase Depo-Provera in the AMAL (3).

Depo-Provera. Prevention or pregnancy dose on AMAL instead of endometriosis dose. Need chlamydia tests. Stock not adequate to meet needs.

BCPs are not on AMAL.

Window of choice of BCPs on AMAL.

Requested a change in AMAL BCPs.

For BCPs, triphasic BCPs need to be included.

Want additional BCPs included on AMAL. Need to be issued more Depo-Provera. It is on AMAL but we don't have enough quantities to accommodate women. BCPs that are authorized on AMAL are not the products preferred/requested by women.

More variety of BCPs. I only carry Ortho Novum 777. Any other varieties I get have to come from procurement as a non-AMAL item. It just becomes an inventory nightmare. Clinics are not always supportive to supplement stock.

Ortho Novum 150 and Triphasal.

The quantities of certain items are not adequate. Not enough varieties of BCPs.

There are a lot of pharmaceuticals that we don't use. Need Ortho Novum 777, Triphasal -- hospitals get all the updated pills but we don't get them.

No change/response (n = 11).

When the full complement of women arrive, they will be better able to assess adequacy.

No - changes that are needed are in the process.

No comment made (9).

(Appendix A continues)

"What, if any, recommendations have you made for AMAL changes to enhance your ability to diagnose and treat women more effectively?"

Pregnancy/STD testing (n = 4).

Recommended increasing pregnancy test in AMAL and switching to a different brand of test kit.

Reliability and ease of use of pregnancy test kits need greater emphasis in selection process.

Pregnancy tests are inadequate, birth control selection is outdated.

Onboard testing for chlamydia.

Miscellaneous medical supplies (n = 4).

Have not yet been approached. When approached will recommend a thorough cost analysis of pharmaceuticals.

More injectable antibiotics to use with a physician's order.

Ultrasound.

Ceucmin cream should be added to the women's AMAL.

Appendix B

"Comments, concerns, and/or recommendations" Midsurvey question

No comment offered (n = 21).

Pregnancy-related issues (n = 5).

Increase in number of women coming to sick call prior to going underway. Many come to medical to make certain pregnancy status.

The capability of caring for a ruptured ectopic pregnancy is very anxiety-provoking while at sea.

Medical officer is concerned about losing a female corpsman due to pregnancy and insists that ship needs a female corpsman.

Most women procure their own pregnancy test kits and use ship's medical to confirm.

We need to standardize pregnancy test kits. When go to vendor, they're expired, the backload is too great. Usually we go to the company. Problem is getting this into the system to make it available. Want to get away from stockpiling due to problems with expiration.

SAMS/supply problems (n = 3).

The major concern onboard, from a medical standpoint, is supplies and the length of time from requisition to arrival. This is a continuing problem. Physician feels problem would be best addressed by allowing medical to procure all medical supplies.

Would like supply to interface with SNAP II in SAMS.

SAMS is inadequate and not user friendly.

"People" issues (n = 3).

A lot of young women present themselves to sick call with emotional concerns and express a desire to get orders off the ship. This takes a lot of time providing counseling.

Too many people are sent to ships who are not fit for shipboard life. These people cause a lot of time to be spent on them and create administrative problems.

Women are seen almost (by medical) almost twice as much as men.

Appendix C

Health-care provider issues: categorical response item	"Yes"	"No"	"N/A"
When examining female patients, does the layout of your facility allow for adequate privacy?	78.1%	21.9%	00.0%
Is your staff able to provide female standbys for female patients?	93.8%	06.3%	00.0%
Are nonmedical females routinely used as standbys?	21.9%	75.0%	03.1%
As a provider, do you feel you have been adequately trained to perform GYN exams and treat common female-specific problems?	81.3%	15.6%	03.1%
As a provider, do you have the diagnostic equipment that you need to diagnose illnesses in women?	75.0%	21.9%	03.1%
Do you have adequate supplies to conduct Pap smears?	71.9%	18.8%	09.4%
Have there been occasions, while deployed, that you have had to medically transfer female patients to an increased echelon of care?	53.1%	40.6%	06.3%
In these cases of medical transfers, were there any female patients transferred because of inadequate supplies, equipment, or medical expertise?	37.5%	28.1%	34.4%
Is your supply of these contraceptives (condoms, Depo-Provera, Norplant, BCPs, foam, diaphragms, IUDs) adequate?	62.5%	37.5%	00.0%
When women report aboard on Permanent Change of Station (PCS), is pregnancy testing a routine part of the check-in procedure?	09.4%	90.6%	00.0%
Are women tested for pregnancy, prior to an extended deployment, as routine protocol?	15.6%	71.9%	12.5%

Appendix D

"What do you feel are the major issues facing women aboard this ship?"*

OB/GYN, STDs, and birth control (n = 8).

Availability of specialized OB/GYN services.

Access to OB/GYN health care ashore.

Trying to provide adequate health care. Treatment for prolonged GYN problems. When women get sick they get really sick. Don't have accessibility to GYN care.

STDs, keeping Pap current.

STDs and pregnancy.

Pregnancy (3).

Personal immaturity (n = 5).

Maturity, responsibility in personal and professional matters.

Maturity level low.

General maturity level of both men and women in terms of women as equal workers.

Age of the women (18-22). First ship, first time away from home. They seem to be trying to find their identity and independence, frequently leading to poor judgment calls.

Psychological immaturity. Need to be accountable for actions.

Barriers to providing adequate health care (n = 5).

Patient/health-care provider relationship becomes an issue. Some women do not or hesitate visiting sick call because they see and work with the health-care provider in personal and professional settings.

Not having a female corpsman aboard has prevented some females from going to sick bay.

Lack of privacy and ship's schedule makes it difficult for women to be examined.

Confidentiality.

Must have a female in the medical departments.

Inadequate berthing (n = 4).

Berthing, privacy.

Berthing accommodations.

Berthing is not adequate.

Female berthing--major problems. Fifty women sharing 2 showers and 4 toilets.

(Appendix D continues)

"What do you feel are the major issues facing women aboard this ship?"*

Miscellaneous: Gender issues (n = 3).

Gender identity/job performance.

"No dating" policy. I feel it should be strictly enforced. Dating among sailors impacts and interferes in unit moral and therefore interferes with mission requirements.

Child care, especially for single women.

Personnel issues (n = 2).

Results of positive pregnancy on career plans.

Loss of personnel after pregnancy. Billets being gapped.

No comment offered (n = 4).

* One survey did not contain this question; N = 31.

Appendix E

"Comments, concerns, and/or recommendations" Final survey question

No comment offered (n = 19).

Treatment barrier (n = 4).

Would like more training in dental emergencies.

AMAL insufficient--needs a complete review. Need more emergency-care training on care for women.

Recommend that medical (areas) be off limits to all unauthorized personnel.

Major concern: our limited capability to provide standard of care. Recommend more aggressive physical screening/standards for both male and female personnel prior to being assigned to ships. Also would like to see provider with experience in GYN assigned to deployed ships.

Miscellaneous: Personnel comments (n = 4).

Generally speaking, the women have had a positive influence on the command.

Junior personnel should not be assigned to shipboard duty--not mature enough.

A lot of Sailors of the Quarter are female. A problem that males and females alike are not ready to be adults.

Plans to start and maintain a vigorous birth control, pregnancy awareness, and STD avoidance program onboard.

Crew psychological concerns (n = 3).

Sexual abuse is a major issue with most of the women who have recurring difficulties and end up in medical. At least 50-60% of our patients have significant issues. It is overwhelming. We do not have the resources to help these people. Let's admit that most of the young women in the Navy are running from something--mostly abusive situations.

A majority of our referrals for suicidal ideation (and other psych evaluations) are female, and most of them report that they've been unhappy since boot camp or enlisted for the wrong reasons (to please parents).

Psychological referrals for social adjustment problems are main medical problem aboard ship.

Miscellaneous: Medical comments (n = 2).

Had quite a few spontaneous abortions around time of deployment.

Feels that the ship receives excellent, responsive support from the nearby clinic.

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Women have served aboard auxiliary U.S. Navy ships, as an integrated member of the shipboard work force since 1978. In 1994, women first started serving aboard combatant ships with the infusion of women into the work force of the USS DWIGHT D EISENHOWER (CVN-69). The provision of the highest standard of medical care for both men and women is a priority at all levels in the U.S. Navy. This study is a process evaluation from a phenomenological perspective of the perceptions of shipboard health-care providers. This evaluation was performed by conducting a personal interview with the senior health-care provider of 36 ships where women are integrated members of the work force. Medical department representatives report that most ships have training programs for birth control (90.6%), sexually transmitted diseases (96.9%), and the Navy pregnancy policy (84.4%). Health-care providers also report perceived limitations in the lack of personnel and fiscal resources, gynecological training, and inadequate or inappropriate supplies (i.e., contraceptives, pregnancy tests, and sexually transmitted disease test kits).

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